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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,673	06/18/2008	Christopher Ian Blake	39084-200742	2843

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EXAMINER	
TUN, NAY L	
ART UNIT	PAPER NUMBER
2612	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

indocket@btlaw.com

Office Action Summary	Application No.	Applicant(s)	
	10/590,673	BLAKE ET AL.	
	Examiner	Art Unit	
	NAY TUN	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-51* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 August 2006* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *07/24/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims status

1. In the preliminary amendment filed on August 26, 2006, claims 49-50 have been amended. Therefore, claims 1-51 are currently pending for examination.

Drawings

2. Figures 7A, 7B, 8 and 9 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 23, 29-31, 37 and 43-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 23 and 37, the phrase "the like" renders the claim(s) indefinite because

the claim(s) include(s) elements not actually disclosed (those encompassed by "the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim 29 recites "encrypted information", "a reader", "an unsecured area", "an expected code". It is unclear they are the same or different elements from those recited in the independent claim 18 or not. Claim 30 is also rejected since it depends from the rejected claim 29.

Claim 43 recites "encrypted information", "a reader", "an unsecured area", "an expected code". It is unclear they are the same or different elements from those recited in the independent claim 32 or not. Claim 44 is also rejected since it depends from the rejected claim 43.

Claim 31 recites “said communications”. It is unclear that it is referring to “encrypted communications” or “decrypted communications”. For the purpose of examination , Examiner will assume as "said encrypted communications".

5. Claims 24 and 38 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the relationship between “a master computer” and the reader. As the claims 24 and 38 recites "said reader is autonomous if ... a master computer is brought down", the relationship between the reader and the master computer is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 46-51 are rejected under 35 U.S.C. 102(b) as being anticipated by **Hyatt**, Jr. (US 5,319,362).

Regarding Claim 46, **Hyatt** discloses a method of providing antipassback in an access control system, said method comprising the steps of reading antipassback information from a read/write smartcard (Fig. 7A and Col. 3 Lines 31-40: key with memory) presented to a read/write reader (reader 102); checking permissions using said read/write reader; and updating said read/write smartcard with updated antipassback information using said reader (Fig. 4C and Col. 5 Lines 33-67: the key memory antipassback data is checked and writes an antipassback message into the antipassback memory address).

Regarding Claim 47, **Hyatt** discloses a method of providing antipassback in an access control system, said method comprising the steps of:

reading antipassback information from a read/write smartcard (Fig. 7A and Col. 3 Lines 31-40: key with memory) presented to a read/write reader (reader 102);

determining if said antipassback information passes an integrity check based on an entry/exit pattern; and if the antipassback information passes the integrity check, writing updated antipassback information to said read/write smartcard and granting access (Fig. 4C and Col. 5 Lines 33-67: the key memory antipassback data is checked and writes an antipassback message

into the antipassback memory address and access granted in step 412).

Regarding Claim 48, **Hyatt** discloses the method according to claim 47 and further comprising the step of, if the antipassback information fails to satisfy the integrity check, denying access (Fig. 4C and Col. 5 Lines 33-67: the key is rejected).

Regarding Claim 49, **Hyatt** discloses the method according to claim 46 and further discloses wherein said antipassback is able to be disabled (col. 4 Lines 64-67: antipassback feature can be overridden).

Regarding Claim 50, **Hyatt** discloses the method according to claim 46 and further discloses wherein said antipassback is able to be normalized so that a cardholder may proceed through an antipassback area without violating antipassback rules (col. 4 Lines 64-67: antipassback feature can be overridden).

Regarding Claim 51, **Hyatt** discloses the method according to claim 50 and further discloses wherein a database of readers is updated with an antipassback flag (Col. 5 Lines 33-67: a message is sent to the master programmer).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in **Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966)**, that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows: ***(See MPEP Ch. 2141)***

a. Determining the scope and contents of the prior art;
b. Ascertaining the differences between the prior art and the claims in issue;
c. Resolving the level of ordinary skill in the pertinent art; and
d. Evaluating evidence of secondary considerations for indicating obviousness or nonobviousness.

9. Claims 1-4, 8-14, 18-22, 24-29, 31-36, 38-43 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Blake** (**Blake**: WO 2004/010373) in view of **Conklin** (**Conklin**: US 6,218,955) and further in view of **Harvey** et al. (**Harvey**: US 4,634,846).

Regarding Claim 1, **Blake** discloses a relay module for connection to a door latch in a secure area, comprising:

a micro-controller (Fig. 7, HSM 704 and controller 706) decrypting encrypted communications (Page 15, Lines 24-31: HSM 704 decrypted the encrypted message from the reader 702) from a reader in an unsecured area (Fig.7, reader 702 and Page 15, Lines 11-14) and said micro-controller actuates said door latch (Fig. 7 and Page 15, Lines 19-21: controller 706 controls the operation of door latch 708).

Blake further discloses the controller 706 receives the decrypted communications including the access number (Page 15 Lines 29-31) and determines whether the access is granted or not based upon the access rights obtained from the smartcard (Page 16, Lines 18-20).

Blake does not explicitly disclose comparing the access code to an expected code or granting access if the comparison indicates a correct match.

In the same field of endeavor, **Conklin** discloses an access control system (Fig. 1-2) wherein a card reader 17 receives the access code and transmits it to the lock controller 16 and

the microprocessor of the lock controller 16 compares the access code to the valid i.e. expected access codes and generates a release signal if the comparison matches (Col. 3 Lines 31-48).

Therefore, it would have been obvious to the one of the ordinary skill in the art at the time of the invention was made to compare the access code received by the lock controller to the valid/expected code and grant the access if the comparison matches, as taught by **Conklin**, in the system of **Blake**, as a known implementation in the base device of the lock controller, with the predictable result of authentication of the received code.

The combined embodiment of **Blake** and **Conklin** does not explicitly disclose said micro-controller controls the door latch via a relay switching power. However, the preceding limitation is known in the art of access control devices. **Harvey** discloses an access control system with card reader (abstract) having a relay that actuates the door strike 151 by switching power (Fig. 4 and Col. 7 Lines 28-31).

Therefore, it would have been obvious to the one of the ordinary skill in the art at the time of the invention was made to provide a relay as taught by **Harvey**, in the combined embodiment of **Blake** and **Conklin**, as a known implementation in the base process of controlling an access door with the predictable result of allowing the entry of a user.

Claim 8 is rejected with respect to claim 1. Even though claim 8 is a method claim, the combined system of **Blake**, **Conklin** and **Harvey** as set forth in claim 1 above discloses the claimed steps.

Regarding Claim 9, the combination of **Blake**, **Conklin** and **Harvey** discloses the method of claim 8 and further discloses wherein a micro-controller implements said decrypting

and comparing steps (**Blake**: Page 15, Lines 24-31and **Conklin**: Col. 3 Lines 31-48: the combined controller implements decrypting and comparing as set forth in claim 1 above).

Regarding Claim 10, the combination of **Blake**, **Conklin** and **Harvey** discloses the method of claim 9 and further discloses wherein a relay coupled to said micro-controller implements said switching step (**Harvey**: Fig. 4 and Col. 7 Lines 28-31).

Regarding Claim 14, the combination of **Blake**, **Conklin** and **Harvey** discloses the method of claim 8 and further discloses the step of receiving said encrypted communications from said reader (**Blake**: Page 15, Lines 24-31).

Regarding Claim 18, the combined system of **Blake**, **Conklin** and **Harvey** discloses the reader for determining access rights in response to presentation of a card (Fig. 8 Lines 4-20 and Fig. 9, smart card 920) and all other claimed limitations as set forth in claim 1 above.

Claim 32 is rejected with respect to claim 18. Even though claim 32 is a method claim, the combined system of **Blake**, **Conklin** and **Harvey** as set forth in claim 18 above discloses the claimed steps.

Regarding Claims 20 and 34, the combined system of **Blake**, **Conklin** and **Harvey** discloses the relay module of claims 18 and 32 as set forth in claims above and further discloses wherein said door latch is directly connected to said relay module (**Harvey**: Fig. 4 and Col. 7 Lines 28-31).

Regarding Claims 2, 11, 21 and 35, the combined system of **Blake**, **Conklin** and **Harvey** discloses the system/method of claims 1, 10, 20 and 34 as set forth in claims above but does not explicitly disclose wherein said relay module and said door latch are a single module.

However, said relay module and said door latch will perform the same functions whether they are a single module or two separate modules and the specification does not recite any particular importance of being in a single module. Therefore, it would have been obvious to the one of the ordinary skill in the art at the time of the invention was made to make said relay module and said door latch as a single module since it has been held that integration of the essential elements involves only a routine skill of the art. In re Lockhart, 90 USPQ 214 (CCPA 1951).

Regarding Claims 3 and 12, the combined system of **Blake**, **Conklin** and **Harvey** discloses the system/method of claims 1 and 9 as set forth in claims above and further discloses wherein said micro-controller enables said relay if the comparison indicates a correct match (**Harvey**: Fig. 4 and Col. 7 Lines 28-31 and **Conklin**: Col. 3 Lines 31-48).

Regarding Claims 4 and 13, the combined system of **Blake**, **Conklin** and **Harvey** discloses the system/method of claims 3 and 12 as set forth in claims above and further discloses wherein if said relay is enabled, power runs through said door latch to unlock a door (**Harvey**: Fig. 4 and Col. 7 Lines 28-31).

Claims 29 and 43 are rejected with respected to claims 1, 18 and 32 above.

Regarding Claims 19 and 33, the combined system/method of **Blake**, **Conklin** and **Harvey** discloses the access control system according to claims 18 and 32 and further discloses wherein said generated encrypted communications comprises an access command for said relay module (**Conklin**: Col. 3 Lines 31-48).

Regarding Claims 22 and 36, the combined system of **Blake**, **Conklin** and **Harvey**

discloses the system/method of claims 18 and 32 and further discloses wherein said reader comprises logic functions and a database residing in said reader (**Blake**: Page 13 Lines16-20: the scanned fingerprint is stored and compared in the reader 500).

Regarding Claims 24 and 38, the combined system of **Blake**, **Conklin** and **Harvey** discloses the system/method of claims 22 and 36 and further discloses wherein said reader is autonomous if communications are cut or a master computer is brought down (Fig. 2-3, Fig. 8 and Page 11 Lines 9-25: a computer is used for enrolment and Verification processes of Fig. 2-3 and the reader 500 does not require the computer i.e. is autonomous for access control process in Fig. 8).

Regarding Claims 25 and 39, the combined system of **Blake**, **Conklin** and **Harvey** discloses the access control system/method according to claims 18 and 32 and further discloses wherein said reader is a smartcard reader and said card is a smartcard (**Blake**: Fig. 9, 920 and 902).

Regarding Claims 26 and 40, the combined system of **Blake**, **Conklin** and **Harvey** discloses the access control system/method according to claims 25 and 39 and further discloses wherein said smartcard implements an anti-passback feature (**Harvey**: Col. 3 Lines 54-65).

Regarding Claims 27 and 41, the combined system of **Blake**, **Conklin** and **Harvey** discloses the access control system/method according to claims 18 and 32 and further discloses wherein said reader is a biometric reader (**Blake**: Page 15 Lines 8-15: biometrics smartcard reader).

Regarding Claims 28 and 42, the combined system of **Blake**, **Conklin** and **Harvey**

discloses the access control system/method according to claims 18 and 32 and further discloses wherein said relay module is a storage relay module (**Blake**: Page 15 Lines 8-31, HSM 704 and controller 706 of the module perform decryptions and communication and therefore, a storage memory for storing programs for decryptions and communications is necessitated).

Regarding Claims 31 and 45, the combined system of **Blake**, **Conklin** and **Harvey** discloses the access control system/method according to claims 18 and 32 and further discloses wherein said communications are encrypted using 128-bit AES, 3DES, DES, or skipjack (**Blake** Page 15 Lines 15-16 and Fig. 7 and 9-10).

10. Claims 23 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Blake**, **Conklin** and **Harvey**, further in view of **Hyatt**.

Regarding Claim 23 and 37, the combined system/method of **Blake**, **Conklin** and **Harvey** discloses the access control system/method according to claims 22 and 36 as set forth in claims above but does not explicitly disclose wherein said database holds information including access times, users, hot-listing, holidays, and the like.

However, the preceding limitation is known in the art of access control systems. **Hyatt** discloses an electronic security system including a controller for controlling access to a location through activation of a lock mechanism in response to coded data and command instructions read from a key or card containing an electronic memory (abstract). **Hyatt** further teaches a table of key identification numbers valid for the specific reader and a time restriction table to determine whether the key is valid for particular day or time or holiday for checking restrictions (Col. 4

Lines 44-53).

Therefore, it would have been obvious to the one of the ordinary skill in the art at the time of the invention was made to provide tables i.e. database including access times, users, hot-listing, holidays, as taught by **Hyatt**, in the combined system/method of **Blake**, **Conklin** and **Harvey**, as a known improvement in the base device of a database of an access control system with the predictable result of checking whether the restrictions should be applied to the user presenting the card/key or not.

11. Claims 5-7, 15-17, 30 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Blake**, **Conklin** and **Harvey**, further in view of Castro (Castro: US 2005/0078427).

Regarding Claims 5, 15, 30 and 44, the combined system of **Blake**, **Conklin** and **Harvey** discloses the system/method of claims 1, 14, 29 and 43 as set forth in claims above but does not explicitly disclose at least one buffer coupled to said micro-controller for receiving communications.

However, the preceding limitation is known in the art of data communications. Castro discloses a protection circuit coupled to the I/O lines for protecting a data acquisition device from destructive electrical conditions while keeping the output impedance of the device I/O lines to a minimum power dissipation (abstract and Paragraph [0016]). Castro further teaches at least one buffer coupled to said micro-controller for receiving communications (Fig. 3, device 300 with I/O buffer 330).

Therefore, it would have been obvious to the one of the ordinary skill in the art at the

time of the invention was made to provide a buffer circuit as taught by Castro, in the combined embodiment, as the motivation lies in Castro for protecting the device from destructive electrical conditions such as ESD, over-voltage and over current (Paragraph [0016]).

Regarding Claims 6 and 16, the combined module/method of **Blake**, **Conklin**, **Harvey** and Castro discloses the relay module/method of claims 5 and 15 as set forth in claims above and further discloses wherein said at least one buffer protects said micro-controller from being damaged if a spike occurs in said communications between said reader and said relay module (Castro: Fig. 3 and Paragraph [0017]).

Regarding Claims 7 and 17, the combined module/method of **Blake**, **Conklin**, **Harvey** and Castro discloses the relay module/method of claims 5 and 15 as set forth in claims above and further discloses wherein said at least one buffer rectifies any voltage level drop between said reader and said relay module (Fig. 3, elements 310 and 320 and Paragraph [0057-0059]).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- **Blake** (WO 2004/010372) discloses secure transmission systems utilizing biometric sensors.

Contact Information

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nay Tun whose telephone number is (571) 270-7939. The examiner can normally be reached on Mon-Thurs from 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Daniel Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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